

DCA13MR002
Conrail - Shared Assets
Derailment/Hazardous Material Release
Paulsboro, New Jersey
November 30, 2012

NTSB - Interview of Conrail Signal Inspector, Facility Department

UNITED STATES OF AMERICA

NATIONAL TRANSPORTATION SAFETY BOARD

* * * * *

Investigation of:

*

*

CONRAIL DERAILMENT/HAZARDOUS

*

MATERIAL RELEASE

*

Docket No.: DCA-13-MR-002

PAULSBORO, NEW JERSEY

*

NOVEMBER 30, 2012

*

*

* * * * *

Interview of: RICHARD GREINER

Incident Command Center
Paulsboro, New Jersey

Wednesday,
December 5, 2012

The above-captioned matter convened, pursuant to notice.

BEFORE: TIMOTHY DEPAEPE
Accident Investigator

APPEARANCES:

TIMOTHY DEPAEPE, Accident Investigator
Signal Group Chairman
National Transportation Safety Board
Office of Railroad, Pipeline and Hazardous Materials
DuPage Airport
31 West 775 North Avenue
West Chicago, Illinois 60185

PII

PII

CYRIL GURA, Safety Engineer
Track Group Chairman
National Transportation Safety Board
Office of Railroad, Pipeline and Hazardous Materials
DuPage Airport
31 West 775 North Avenue
West Chicago, Illinois 60185

THOMAS NOON, Signal and Train Control Inspector
Federal Railroad Administration

DAVID KILLINGBECK, Chief Engineer Structures
Federal Railroad Administration

THOMAS BILSON, Assistant Chief Engineer
Maintenance of Way and Structures
Conrail

DOUG TRACY, Assistant Chief Engineer
Communications and Signals
Conrail

WILLIAM KEEBLER, Assistant General Chairman
Brotherhood of Railroad Signalmen

<u>ITEM</u>	<u>I N D E X</u>	<u>PAGE</u>
Interview of Richard Greiner:		
By Mr. DePaepe		5
By Mr. Gura		10
By Mr. Tracy		12
By Mr. Noon		12
By Mr. Killingbeck		14
By Mr. DePaepe		17
By Mr. Noon		19
By Mr. DePaepe		19

I N T E R V I E W

(9:11 a.m.)

MR. DEPAEPE: It is currently 9:11 a.m. and we're going to interview Mr. Richard Greiner, and this is concerning the Paulsboro movable bridge derailment with hazardous materials release on October 30, 2012.

UNIDENTIFIED SPEAKER: November 30th.

MR. DEPAEPE: Huh?

UNIDENTIFIED SPEAKER: November 30th.

MR. DEPAEPE: What am I saying? Okay. That -- correction. That would be November 30, 2012, and it is designated as DCA-13-MR-002. My name is Tim DePaepe, D-e-P-a-e-p-e. I am a signal inspector with the National Transportation Safety Board.

I'm going to allow everybody at the table here to introduce themselves, tell what their job title is and their business affiliation. To my right?

MR. GURA: Cy, C-y, Gura, G-u-r-a, Safety Engineer, NTSB.

MR. BILSON: Thomas Bilson, B-i-l-s-o-n, Assistant Chief Engineer, Maintenance of Way and Structures, Conrail.

MR. TRACY: Doug Tracy, T-r-a-c-y, Assistant Chief Engineer, C&S, Conrail.

MR. NOON: Thomas Noon, N-o-o-n, FRA, Signal and Train Control Inspector.

MR. GREINER: Richard Greiner, G-r-e-i-n-e-r, Signal

1 Inspector, Facility Department, Conrail, Woodbury, New Jersey.

2 MR. KEEBLER: Bill Keebler, Assistant General Chairman
3 with the Brotherhood of Railroad Signalmen.

4 MR. KILLINGBECK: David Killingbeck,
5 K-i-l-l-i-n-g-b-e-c-k, Chief Engineer Structures, Federal Railroad
6 Administration.

7 MR. DEPAEPE: Thank you, gentlemen.

8 INTERVIEW OF RICHARD GREINER

9 BY MR. DEPAEPE:

10 Q. Richard, I want to talk about some trouble tickets
11 starting in October 27th of 2012 up to the date of the accident.
12 And, specifically, I'm looking to see what trouble events you may
13 have participated in their repair or replacement, and I'd like to
14 start with -- in event number 62528. But before we're going to do
15 that, excuse me, I'd like you just to state for the record your
16 date of hire and jobs you've worked up to current date?

17 A. I was hired in June 19th, 1978, in the signal department
18 at Consolidated Rail Corporation. I've been a -- I started out as
19 a helper, motivated up to a position of trainee and a assistant
20 maintainer or signalman at that time. I was promoted to
21 signalman. I've had titles as a testman, signal testman,
22 assistant foreman, foreman, and currently, now, a signal
23 supervisor.

24 Q. Okay. Thank you very much.

25 Again, let's go back to this event number 62528 that

1 is -- has a date reported of October 31st, 2012. According to the
2 trouble log, it says the problem was the bridge will not lock.
3 The repairs were remove debris from the seat and the gears. Can
4 you tell me, in your own words, what happened as far as your
5 involvement; when you were called; what you did?

6 A. Yeah.

7 Q. Thank you, sir.

8 A. Well, we were called down there -- I was called down
9 there to assist Supervisor Ohr to see if there was a signal
10 problem and we could not, like, operate the bridge; something was
11 preventing it from being worked. And it ended up being an error
12 code inside the operating equipment and we determined that Dave
13 Ohr, being a former B&B supervisor, he knew the equipment that was
14 probably in fault.

15 So I assisted him. We had to remove a steel plate that
16 was protecting the proximity detectors for the B&B side of it that
17 sits in the center of the gauge. And we found debris in there
18 from Hurricane Sandy. Like, a branch had washed up in there and
19 prevented this from seating and that prevented the bridge from,
20 you know, operating and closing like it should have. So we
21 removed the branch and operated the bridge and it worked and it
22 closed and it worked as intended.

23 Q. When you say it worked as intended, that's bridge
24 operation. Did you also test the signal while you were there --

25 A. Yes, we did.

1 Q. -- to see if you got a signal?

2 A. Yes, yes. Yes, we did. We were --

3 Q. And were you able to get a signal?

4 A. Yes, we were. Yeah.

5 Q. Okay.

6 A. The bridge -- we did a full open and closure with
7 announcements, opening and closing with clear signals, or green
8 signals.

9 Q. Okay. All right, thank you.

10 I want to move to another trouble ticket that you may
11 have had involvement in and that was -- it's designated as 62619
12 on November 5th. The problem was bridge will not open. The
13 repair, adjust prox detector. The cause says, under
14 investigation. Can you tell me, in your own words, what
15 transpired that day in relation to this?

16 (Phone ringing; asides.)

17 BY MR. DEPAEPE:

18 Q. Go ahead.

19 A. Yes. I was summoned there for a trouble call to assist
20 B&B. There was a B&B employee, Gary Golden; Mr. Gary Golden was
21 there. I arrived there and I found out that in the operating room
22 that one of our prox detectors was not lit or in service. It was
23 not lit and not functioning. It was on the northwest rail, which
24 is on the north side of the bridge and west towards the river side
25 of the creek.

1 I noticed that it was very cold that evening and the
2 bridge -- and the rail had run somewhat and the prox detector was
3 off slightly. So I had to make an adjustment to the prox detector
4 between a quarter inch and a half an inch adjustment.

5 Q. In this particular case, did the prox detector fail? I
6 mean, did you have to replace the prox detector --

7 A. No. Oh, no.

8 Q. -- or just adjust the prox detector?

9 A. Just adjust it because the rail had shrunk and the
10 bridge had moved, you know, due to the expansion and contraction
11 of the cold weather. It moved slightly, just enough to not make
12 that prox detector work as intended.

13 Q. Okay. In the notes here for this incident, I need a
14 little more explanation because I don't quite understand it. It
15 says that they found the north side rail pumping under train
16 moves, causing the prox detector to break contact. When you talk
17 pump -- when I think pumping, I think of almost rails out of
18 alignment, bouncing up and down. Are you talking a sliding pump,
19 you know, a vertical pump or a horizontal?

20 A. I probably -- well, if it was -- I didn't see anything
21 pumping, but I --

22 Q. Okay.

23 A. I just saw, like, the movement that the expansion and
24 contraction of the bridge because it was cold --

25 Q. Right.

1 A. -- had shrunk and pulled itself -- like, if this was a
2 prox detector and that was a slide bar, it moved slightly that
3 much, and it doesn't take much, and it was not working. So it
4 shows a rail seat failure or a locked bar.

5 Q. So, to your knowledge, you didn't see any pumping, like,
6 a joint pumping, you just --

7 A. No. No, I did not.

8 Q. It was due to contraction/expansion factors due to
9 weather?

10 A. Weather conditions, yes.

11 Q. Okay. Okay.

12 A. Which is quite common.

13 Q. Do you in -- you've had an extensive career. Do you
14 have to adjust the proximity detectors often due to weather
15 conditions?

16 A. I would say, yeah, when you have extreme temperature
17 changes, you have to, yeah.

18 Q. Will you speak up just a little?

19 A. Yeah. When you have extreme temperature conditions, you
20 have to -- sometimes have to make adjustments as well.

21 Q. All right.

22 A. Especially, when you go from like a warm day to like a
23 really cold, cold night, so --

24 Q. All right, thank you.

25 I'm going to move on to an event designated as 62816 on

1 November 21st. And the failure reported was bridge did not open
2 after train and it says it's under investigation. Can you explain
3 to me what you did in relation to this event on that day?

4 A. I was summoned to that bridge to help on the signal side
5 of it. There was already -- Supervisor Hill was already there on
6 the scene, along with Supervisor Dave Ohr. And when I got there,
7 they already had found the error code, whatever it was. They
8 never really got into detail about what it was, but they had the
9 bridge -- they were under the process of testing the bridge when I
10 arrived on the scene. So it really wasn't too much. I was just
11 summoned there to assist, if need be, on the signal side because
12 there was no one there. It was only supervision there. There was
13 no one there from the craft, from the signal craft.

14 Q. So they pretty much had the situation under control --

15 A. Yes.

16 Q. -- by the time you got there and --

17 A. Yes.

18 Q. So your involvement was minimal at best?

19 A. Very minimal, yes.

20 Q. Okay.

21 MR. DEPAEPE: All right. At this time I'm going to go
22 around the table and let the individuals here ask you any
23 questions that they may have. Mr. Gura?

24 BY MR. GURA:

25 Q. Richard, in incident 62528, you mentioned a plate --

1 A. Yes.

2 Q. -- that you had to remove the -- a branch from?

3 A. Yes.

4 Q. What plate was that again?

5 A. There's a steel plate in the center of the gauge on
6 the -- I guess it's on the swing side, the north side of the
7 bridge.

8 Q. Okay.

9 A. It's in between the gauge and you lift -- it's a
10 protecting plate and you lift it up and there's proximity
11 detectors for the B&B side of the bridge closure, so --

12 Q. Okay.

13 A. That prevented the bridge from making its complete
14 closure and then not working.

15 Q. Okay. And since you've been a signal supervisor --

16 A. No, I've not been a signal supervisor.

17 Q. You're not a signal supervisor?

18 A. No. No.

19 Q. Oh, I thought you were a signal supervisor.

20 A. No, signal inspector.

21 Q. Oh, okay. I see. Okay. Anyway, I was just going to
22 ask you. There's a quarterly bridge inspection. Have you
23 participated in the quarterly bridge inspection back in June?

24 A. No, I do not.

25 Q. And you do not participate --

1 A. No. Usually, the maintainer assists the other
2 departments -- M&W, B&B -- to inspect the bridge.

3 Q. Okay.

4 A. Yeah.

5 Q. All right. Those are the only questions I have.

6 MR. DEPAEPE: Mr. Bilson?

7 MR. BILSON: I have no questions.

8 MR. DEPAEPE: Mr. Tracy?

9 BY MR. TRACY:

10 Q. I have one question on the event number 62619. Did you
11 observe a train going across the bridge at that time? That
12 was when you had to make the adjustment on the proxes --

13 A. Yeah, I --

14 Q. -- did you see a train go over it at that time or no?

15 A. I cannot recall. I cannot -- I -- you know, I just -- I
16 cannot recall.

17 Q. Okay.

18 A. I may have, but I can't ascertain that fact.

19 Q. Okay.

20 MR. DEPAEPE: Mr. Noon?

21 BY MR. NOON:

22 Q. I have a couple general questions. Richard, on all the
23 calls that you've been called on or know about where the bridge
24 has failed and has a red signal, how often or do you remember if
25 the problem was because the rail, slide rails, did not move? Can

1 you recall if that type of problem is frequent or infrequent or
2 never or --

3 A. I have -- personally, myself, I've never come across
4 that, that situation.

5 Q. Okay. All right. So every time that you have gone to a
6 failure and it was a signal problem, it was the proximity switches
7 or --

8 A. Yes, some --

9 Q. But the actual driving of the rails, that wasn't the
10 issue?

11 A. No, not on my --

12 Q. Okay.

13 A. -- not on my trouble calls.

14 Q. Now you also said there was a limit switch for the
15 bridge indication -- or I mean a proximity switch. We've been
16 calling those switches limit switches.

17 A. Limit switches, yes.

18 Q. That's what we've been calling them.

19 A. Yeah.

20 Q. Now are they proximity-type or are they -- what kind of
21 limit switches are they? Is that the only proximity switch on the
22 bridge for the bridge mechanism?

23 A. No, there's quite a few of them on the B&B side of them.

24 Q. Okay.

25 A. And they're usually backed-up systems. And this one,

1 which I had never seen before until that day --

2 Q. Okay.

3 A. I didn't know about that existence, I mean, because we
4 don't deal with --

5 Q. Right.

6 A. -- really deal with the signal limit switches.

7 Q. Okay.

8 A. But that one happened to be underneath this plate for
9 the B&B side.

10 Q. Okay. So the limits, what we've been calling limit
11 switches on the bridge, are proximity detectors, not levers or --

12 A. Yes.

13 Q. -- U5 boxes or anything like that.

14 A. I believe this one was a proximity detector.

15 Q. Okay. Okay, that's all.

16 MR. DEPAEPE: Mr. Keebler?

17 MR. KEEBLER: No questions.

18 MR. DEPAEPE: Mr. Killingbeck?

19 BY MR. KILLINGBECK:

20 Q. Okay. I think my one question just got answered. The
21 -- what is sensing the span seating, I believe, is what you
22 accessed by removing the plate that was in the gauge?

23 A. Yes.

24 Q. And the indication of that action is with an electronic
25 proximity sensor as opposed to a mechanical limit switch?

1 A. I believe it was a proximity.

2 Q. Okay. Okay. What type of limit sensing device, do you
3 know, exists on the north end of the swing span to tell the B&B
4 equipment when the span is coming into a closed position?

5 A. I think there's several of them. It swings over and
6 they hit several limit switches. It stops the speed of the
7 bridge swing and then it goes into what's called creek (ph.) mode.
8 It's spun (ph.) like, probably, 6 to 8 inches and then it -- then
9 when it -- and there's -- when it comes to a fully closed position
10 and then it indicates and that's when the lock bars --

11 Q. And are those mechanical limit switches or proximity
12 sensors?

13 A. That I'm not sure of. It could be -- I'm not sure to
14 tell you the truth.

15 Q. All right, you have not seen them or you do not
16 recall --

17 A. I -- no, I just saw them just being in the area, you
18 know.

19 Q. Okay, fair answer.

20 A. It could be both, but --

21 Q. Fair enough.

22 A. -- I'm not -- I can't ascertain that 100 percent.

23 Q. On event number 62528, which was the debris in the
24 bridge --

25 A. Yes.

1 Q. -- I guess in the span lift gear. You said you tested
2 the bridge, you -- it was cycled while you were there --

3 A. Yes.

4 Q. -- so you saw that it closed and locked up?

5 A. Yes.

6 Q. And you said that it displayed a signal?

7 A. Yes.

8 Q. Did it display a clear signal upon the bridge locking up
9 or did you have to do something else?

10 A. No, I believe we had -- no, I -- when it went into full
11 operation, we did not have to do any adjustments that I'm aware
12 of.

13 Q. Did you have to do anything to cause the signal to
14 display?

15 A. I don't believe so, no.

16 Q. You didn't have to drop shunts or anything?

17 A. Oh, well, we do the -- we do a -- we usually do a full
18 procedure with a, like, a -- with a radio command --

19 Q. To close?

20 A. -- like directing -- we go through that process though.
21 Sometimes we'll do the -- it's called the M&W switch.

22 Q. Um-hum.

23 A. And you -- you know, you initiate it that way and see
24 how the bridge operates that way, so -- usually, myself, I usually
25 run a -- if I have time and I don't have any train, I'll run a

1 full follow-through shunt test. Usually, what -- I'll open up
2 track relays to simulate a train movement (indiscernible).

3 Q. Okay.

4 A. And I radio command it to see that it initiates and
5 closes.

6 Q. Okay. That's all I have.

7 MR. DEPAEPE: Thank you. I have a couple follow-up
8 questions. This is Tim DePaepe.

9 BY MR. DEPAEPE:

10 Q. Are there any incidents that you're aware of between
11 October 27th and November 30th that aren't listed on here that you
12 may have worked on?

13 A. No.

14 Q. Or is there any routine maintenance you may have done in
15 that period that you recall?

16 A. Not that I recall, no.

17 Q. I want to talk about the signal's circuit itself, just
18 very briefly. It's my understanding that there are two prox
19 detectors, one for each rail on the north and south side. They
20 each have a relay for each set of prox detectors. If those
21 position -- if either one or both of those proximity detector
22 relays are down, you cannot clear a signal; is that correct?

23 A. That is correct, yes.

24 Q. Have you ever been out on a trouble call or during a
25 maintenance check or a monthly inspection, if that's what you do,

1 where you were testing the signal system and the signal cleared
2 with either the slide rails not engaged or the proximity detectors
3 not working? Basically, what I'm asking you, have you ever found
4 like a false clear of the system or the signal cleared when things
5 were not correct?

6 A. I never found a false clear in that case. Our signal
7 system has worked 100 percent of the time as far as I know.

8 Q. Okay.

9 A. I have never witnessed a malfunction where we gave a
10 clear signal.

11 Q. You know, I mean, obviously, things break and go out of
12 adjustment, but that -- it failed safely in the conditions --

13 A. It failed safe; that is correct.

14 Q. -- when you've been out there?

15 A. Yes, it has -- if it has, it has failed safe, yes.

16 Q. Okay.

17 A. Yeah. And there's actually four proximity detectors
18 and --

19 Q. Right.

20 A. -- four relay. So, if one's not working, you will not
21 get a green signal, you will be a red stop signal.

22 Q. Okay, thank you.

23 MR. DEPAEPE: That's all the questions I have, I'm going
24 to go around the table one more time. Mr. Gura?

25 MR. GURA: None.

1 MR. DEPAEPE: Mr. Bilson?

2 MR. BILSON: None for me, thank you.

3 MR. DEPAEPE: Mr. Tracy?

4 MR. TRACY: None.

5 MR. DEPAEPE: Mr. Noon?

6 BY MR. NOON:

7 Q. Proximity switches that the bridge uses as limit
8 switches, are they the same as the ones on the rail?

9 A. No, I don't think they're the same.

10 Q. And the signal department does not maintain them?

11 A. No.

12 Q. Okay.

13 A. No.

14 MR. DEPAEPE: Okay, Mr. Keebler?

15 MR. KEEBLER: Nope.

16 MR. DEPAEPE: Mr. Killingbeck?

17 MR. KILLINGBECK: No, sir.

18 BY MR. DEPAEPE:

19 Q. Basically, what I want to ask you at this time, Richard,
20 is do you have any knowledge or did you work at that bridge within
21 the previous 24 hours of the accident? So going from -- accident
22 occurred about 7:00 on November 30th. Did you work on the bridge
23 at all on November 29th?

24 A. No, I did not.

25 Q. Okay. We're concluding the question portion of this

1 interview and I want to give you the opportunity, if there's
2 anything you know about conditions at the bridge or anything you
3 might have that would add value to our investigation here, I want
4 to give you the opportunity to say that, to say it freely. If you
5 don't have anything to add, that's fine too, but at this point
6 this is your opportunity.

7 A. No, I have nothing else to add to the information
8 already revealed.

9 MR. DEPAEPE: All right, having said that, it is
10 currently 9:31 a.m. and this concludes the interview of
11 Mr. Richard Greiner.

12 (Whereupon, at 9:31 a.m., the interview was concluded.)
13
14
15
16
17
18
19
20
21
22
23
24
25

CERTIFICATE

This is to certify that the attached proceeding before the

NATIONAL TRANSPORTATION SAFETY BOARD

IN THE MATTER OF: CONRAIL DERAILMENT/HAZARDOUS
 MATERIAL RELEASE
 PAULSBORO, NEW JERSEY
 NOVEMBER 30, 2012
 Interview of Richard Greiner

DOCKET NUMBER: DCA-13-MR-002

PLACE: Paulsboro, New Jersey

DATE: December 5, 2012

was held according to the record, and that this is the original,
complete, true and accurate transcript which has been transcribed
to the best of my skill and ability.

Vanita Tildon
Transcriber